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July 7, 1996

Mr. William Knoll
Department of the Navy
Code NAVSEA 08U,
2531 Jefferson Davis Highway,
Arlington, VA 22242-5160

Subject: Department of the Navy Draft Environmental Impact
Statement for the Container System for the Management of Spent
Nuclear Fuel; Comments on

Discussion:

1. This letter provides personal comments based on my review of the Draft Environmental Impact Statement (DEIS) addressing the need, alternatives, and environmental impacts of manufacturing, loading, storing, handling and the transport of naval nuclear fuel containers in support of currently projected needs in support of the U. S. Navy Nuclear Power Program.

A First, I would like to express thanks to those having prepared the DEIS into a complete, comprehensive, and well presented document. A significant amount of research, and organization of facts/data, and computations were needed to support the DEIS. While only a minute portion of the general population takes time to involve themselves in the public processes involving such documents, those of us that do read them, appreciate a well presented volume.

2. While no specific system choice was made as a result of the findings of facts presented in the DEIS it would appear that when all of the various options are presented with regard to the amount of hardware that will be needed, the exposures and latent cancers, transportation risks, ultimate disposal activities, numbers of required

shipments etc. that the Multi-Purpose Canister [MPC] system is the logical system of choice as it minimizes the risk and impact factors in nearly all areas, while appearing to be technically acceptable.

While specific construction details were not warranted or included in the DEIS, the verbal discussions provided of the canisters and overpacks describe common straightforward manufacturing capabilities. Likewise, due to the MPC system having a nominal number of required containers and over packs it also appears to be a fiscally responsible approach.

B In view of the materials presented in the DEIS and my evaluation of the provided information I would like to provide my endorsement of the Multi-Purpose Canister system.

3. Appendix F discussed the feasibility of locating a spent nuclear fuel dry storage on the INEL at a site removed from above the Snake River Plain Aquifer. Section F.4 discusses the hydrology of the Eastern Snake River Plain [ESRP].

This section appears somewhat limited in its view of the total view of the ESRP as it appears to only discuss the subterranean boundaries of the aquifer basin itself. The aquifer of course is simply a sump full of gravel and lava which provides storage and passage of water. The highly porous soils and sediments of the ESRP actually receive water from a much larger area than shown on pages F-2 and F-3. For example precipitation falling on either side of the Teton Mountains or portions of Yellowstone Park (located off the right side of Figure F.1) transit the area and serve to recharge the aquifer through infiltration losses of the river and the many miles of canals and ditches used for irrigation. In the past the Army Corps of Engineers has provided dispersion and spreading areas to the north east of the site to accommodate large spring run offs, and as a result of aquifer transmissivity, flooded areas such as Mud Lake. Consequently, water tables in the area of the ESRP have risen and fallen dramatically due to periods of drought, heavy irrigation demands and higher than normal water years such as currently being experienced in Idaho.

- C The aquifer is simply a sump in a complex fluid system. To be shown accurately, its context and relationship to the entire fluid system should be presented. It is therefore suggested that the final Environmental Impact Statement include a figure [map] that shows the total drainage area which serves to recharge the aquifer.
- D Likewise a schematic showing the relative proportions of the various flows would be meaningful. Such information should be readily available from the Idaho Water Resources Department [phone (208)525-7161]. The Bonneville County, ID Emergency Planning and Management Command Center [phone (208) 529-1220] may also be a source of such information as they maintain a status board of river flows on a continuing basis.

Thank you for your attention to these comments and allowing public involvement.

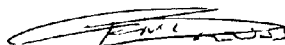
Name

Education/Expertise

Kenneth N. Drewes
Commander- U.S. Navy (Ret.)

A.S. Nuclear Technology
B.S. Liberal Arts
ASEL-Com.,Inst., CFI
30 years nuclear operations.
Previous member of INEL
Natural Phenomena
Committee (10 years).

Sincerely,



K. N. Drewes

Commenter: Kenneth N. Drewes, Idaho

Response to Comments:

- A. Comment noted.
- B. In Chapter 3, Section 3.8, Comparison of Alternatives, the EIS states that the impacts for most categories are small or nonexistent for all alternatives. Since 1957, the Navy has safely shipped over 660 containers of spent nuclear fuel from the shipyards and prototype sites to the Naval Reactors Facility. All of the shipments were made safely by rail and without release of radioactivity. Since any container alternative selected for dry storage and transportation (either by rail, heavy-haul truck, or a combination of both) must meet the requirements of 10 CFR Part 71, Packaging and Transportation of Radioactive Material, and 10 CFR Part 72, Licensing Requirements for the Independent Storage of Spent Nuclear Fuel and High-Level Waste, other containers can also be used safely and reliably.
- C. The Navy agrees with the commenter that the Snake River Plain is the low spot in the Snake River Basin that collects water like a "sump", and a figure of the Snake River Basin would clearly demonstrate this fact. Appendix F, Figure F.1 originally showed the entire Snake River Basin; however, the scale was so small that it was not possible to see the Lemhi Range Area or the Birch Creek Area which are the primary focus of Appendix F. It was necessary to delete sections of the eastern and southern sections of the Snake River Basin in order to make the necessary details in the western and northern sections readable. The complete figure of the Snake River Basin is found in the reference (Rizzo Associates 1996) which is available in the reading rooms.
- D. As suggested by the commenter, the Idaho Water Resources Department and the Bonneville County Emergency Planning and Management Command Center were contacted. It was determined that a simplified schematic of the sort recommended by the commenter showing the relative proportions of the various flows in the Lemhi Area and Birch Creek Area is not readily available. The best information currently available relative to ground water flow in the Lemhi Area and Birch Creek Area is contained in "Hydrology and Digital Simulation of the Regional Aquifer System, Eastern Snake River Plain, Idaho" (USGS 1992), which was used by Rizzo Associates 1996, and the hydrology section of Appendix F is based on Rizzo Associates 1996. There is ample information to conclude that the Lemhi Range Area and the Birch Creek Area are not hydrologically removed from above the Snake River Plain Aquifer and that because of their proximity to faults they are not desirable sites. These factors combined with other environmental impacts and disadvantages associated with these areas are sufficient to eliminate them from further consideration.